What is claimed is:

1. A sheet processing apparatus aligning and stacking a sheet comprising:

a stacking means for stacking the sheet or sheet bundle;

a conveying means for conveying the sheet or sheet bundle toward the stacking means;

a sheet rear end aligning means for aligning rear end of the sheet or sheet bundle upon pressing toward the stacking means the rear end of the sheet or sheet bundle conveyed by the conveying means; and

a controlling means for controlling operation of the sheet rear end aligning means,

wherein the controlling means controls the operation of the sheet rear end aligning means so that acceleration of the sheet or sheet bundle by pressing of the sheet rear end aligning means satisfies a relation:

$$\alpha \leq -\mu_1'g \quad \text{and} \quad \alpha \leq -\mu_2'g$$

where acceleration of the sheet or sheet bundle by pressing of the sheet rear end aligning means at a time that the sheet rear end aligning means presses the rear end of the sheet or sheet bundle to align the rear end, is denoted as α, where gravitational acceleration is denoted as g, where coefficient of kinetic friction between the sheet or sheet bundle pressed by the sheet rear end aligning means and the stacking means is denoted as μ_1', and where coefficient of kinetic friction between the sheet or sheet bundle pressed by the sheet rear end aligning means and the sheet or sheet bundle already stacked on the stacking means is denoted as μ_2'.

2. The sheet processing apparatus according to claim 1, further comprising a processing means capable of temporarily stacking the sheets on an upstream side of the stacking means and the conveying means in the

sheet conveyance direction for processing the sheet or sheet bundle, wherein the sheet or sheet bundle processed at the processing means is conveyed to the stacking means by the conveying means.

3. The sheet processing apparatus according to claim 2, wherein the processing means includes a processing tray capable of temporarily stacking the sheets, an aligning means for aligning the sheets stacked on the processing tray, and a stapling means for stapling the sheet bundle aligned by the aligning means.

4. The sheet processing apparatus according to claim 1, wherein the stacking means has a stacking surface extending substantially horizontally for stacking the sheet or sheet bundle.

5. An image forming apparatus comprising:

an image forming apparatus body for forming an image on a sheet; and

a sheet processing apparatus for aligning and stacking the sheet delivered from the image forming apparatus body,

wherein the sheet processing apparatus is as set forth in any one of claims 1 to 4.

6. An image forming apparatus forming an image on a sheet, comprising:

an image forming section for forming an image on the sheet;

a stacking means for stacking the sheet or sheet bundle on which the image is formed by the image forming section;

a conveying means for conveying the sheet or sheet bundle toward the stacking means;

a sheet rear end aligning means for aligning rear end of the sheet or sheet bundle upon pressing toward the stacking means the rear end of the

sheet or sheet bundle conveyed by the conveying means; and

a controlling means for controlling operation of the sheet rear end aligning means,

wherein the controlling means controls the operation of the sheet rear end aligning means so that acceleration of the sheet or sheet bundle by pressing of the sheet rear end aligning means satisfies a relation:

$\alpha \leq -\mu_1'g$ and $\alpha \leq -\mu_2'g$

where acceleration of the sheet or sheet bundle by pressing of the sheet rear end aligning means at a time that the sheet rear end aligning means presses the rear end of the sheet or sheet bundle to align the rear end, is denoted as α, where gravitational acceleration is denoted as g, where coefficient of kinetic friction between the sheet or sheet bundle pressed by the sheet rear end aligning means and the stacking means is denoted as μ_1', and where coefficient of kinetic friction between the sheet or sheet bundle pressed by the sheet rear end aligning means and the sheet or sheet bundle already stacked on the stacking means is denoted as μ_2'.

7. The sheet processing apparatus according to claim 6, further comprising a processing means capable of temporarily stacking the sheets on an upstream side of the stacking means and the conveying means in the sheet conveyance direction for processing the sheet or sheet bundle, wherein the sheet or sheet bundle processed at the processing means is conveyed to the stacking means by the conveying means.

8. The sheet processing apparatus according to claim 7, wherein the processing means includes a processing tray capable of temporarily stacking the sheets, an aligning means for aligning the sheets stacked on the processing tray, and a stapling means for stapling the sheet bundle aligned by the aligning means.

9. The sheet processing apparatus according to claim6, wherein the stacking means has a stacking surface extending substantially horizontally for stacking the sheet or sheet bundle.